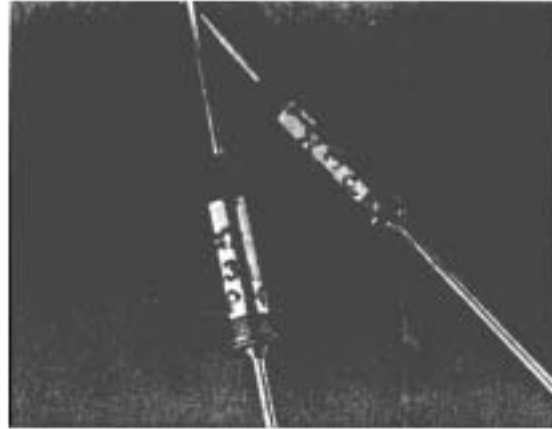


THERMAL CUT-OFFS (THERMAL LINKS)

Responsive, Reliable, Inexpensive, "One Shot"

Overtemperature Protection For:

Major and Small Appliances, Personal Care Products, Heaters, Office Equipment



The TCO responds to temperature by interrupting an electrical circuit when the operating and/or environmental temperature exceeds the thermal rating of the fuse. This is accomplished when the organic pellet experiences a phase change, allowing the spring activated contacts to permanently open the circuit.

RESISTIVE RATINGS

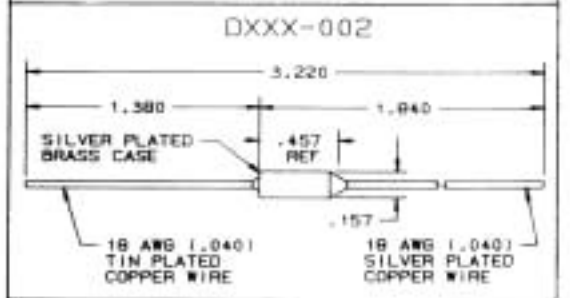
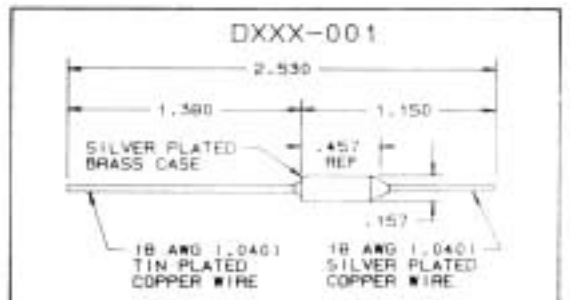
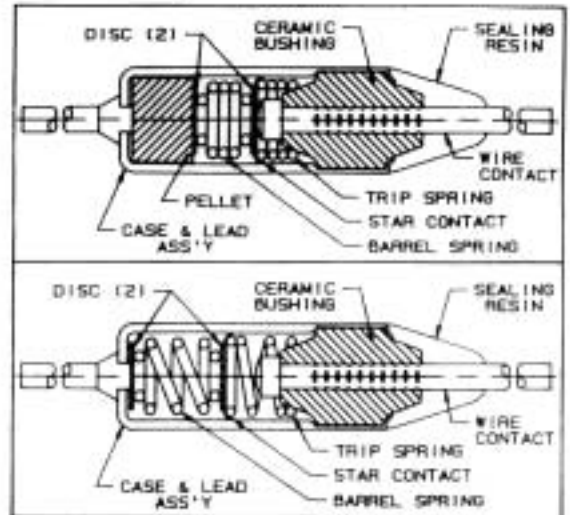
	120VAC	240VAC	277VAC
UL*	16.7/25 Amps	16.7/25 Amps	15/20 Amps
CSA	16.7 Amps	16.7 Amps	15 Amps

* Max normal current carrying capability/overload value

The electrical resistance of a D-Series thermal cut-off is comparable to that found in an equal length of 18 gauge solid copper wire. With proper air flow, heat generation below 15 Amperes is minimal. Above 15 Amperes, the upper limit on current capacity will depend on the environment for each specific application.

Controlled series resistance measurements are made across a total lead span of 1.0 inch on all production units. Using this procedure, typical resistance value is 0.8 milliohms.

Mechanical Specifications



INTERNATIONALLY APPROVED: Type DXXX Approval Agency Certificate Numbers

Approval Agency	Certificate Number	Standard
UL	E-49429	UL 1020
CSA	LR-43273	C22.2 No. 209
BEAR	00284	B53955
VDE		IEC60115/M60901
MITI	33-541 thru 33-557	
FEMKO	056875-01-03	PUBL. E128/C11 20
SEMKO	7979904-01	SEMKO 111/C11 11
SEV	737 003	SEV 1020.1965
UTE	19-479 & 19-481	NF C 73-603
KEMA	88.7665	K25A.07

Note: Types DXXXA & DXXXC Are UL & CSA Recognized.

THERMAL CUT-OFFS (THERMAL LINKS)

Responsive, Reliable, Inexpensive, "One Shot"

Temperature Ratings Maximum Opening Temperature

TCO Part Number	Temp°C	Temp°F	TCO Part Number	Temp°C	Temp°F
D111	72	162	D111	121	250
D125	77	171	D125	128	262
D135	84	183	D135	141	286
D145	87	189	D145	152	306
D170	93	199	D170	169	336
D181	98	208	D181	184	363
D213	100	212	D213	216	421
D226*	104	219	D226*	228	442
D242*	109	228	D242*	240	464
D115	117	243			

Temp. Tolerance: +0° to -4°C (+0° to -7.2°F)
*Temp. Tolerance: +0° to -6°C (+0° to -10.8°F)

DXXX Series:

Thermal cut-off with a 18 awg tin plated copper case end lead.

DXXXA Series:

Thermal cut-off with a 23 awg case end lead. Developed for ease of placement in windings.

DXXXC Series:

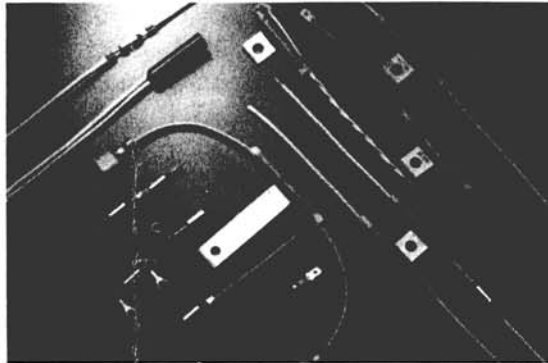
Thermal cut-off with a 18 awg steel case end lead is available, when required.

JD Series:

Thermal cut-off is set in an Aluminum Surface Mount Bracket.

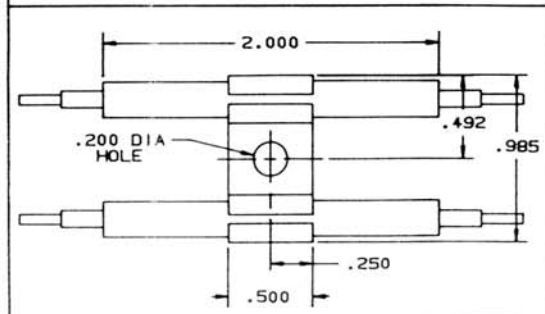
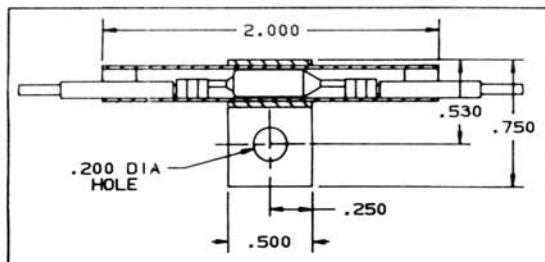
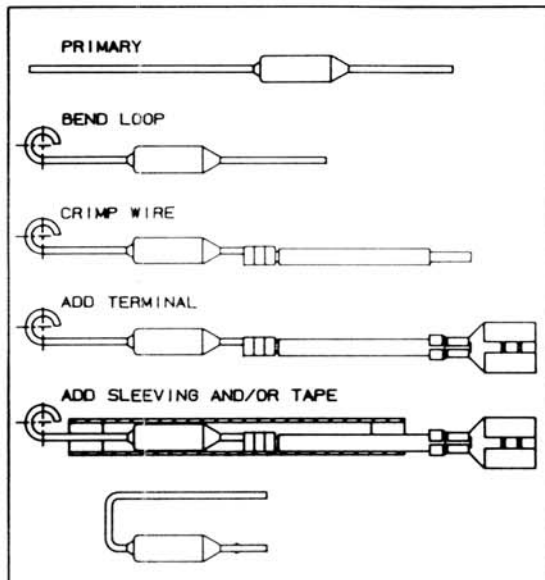
MTP:

Rectangular, insulated thermal cut-off. For use by fhp motor and transformer manufacturers.



Customized Assemblies:

Fuse assemblies ready for your specific application needs, presenting savings in manufacturing time and money for you...



TCO INSTALLATION NOTES

These notes are intended to be used to reduce the risk of malfunction of the thermal cutoff which may result from improper installation during forming of leads, splicing, welding and soldering.

1. **BENDING LEADS**

The TCO leads must be supported 1/8" from bend and case; and 1/8" from bend and epoxy.

2. **MECHANICAL FORCES DURING APPLIANCE CONNECTION**

- a. When installing the TCO, avoid unnecessary bending, twisting, pulling or pushing on the TCO leads.
- b. Excessive clamping may cause denting or crushing of the TCO body, which may cause failure.
- c. Note that the TCO body is electrically live and must be insulated before applying a metal clamp over the TCO body.

3. **SPLICES AND TERMINATIONS**

The connections must be electrically sound to prevent high resistance and secure enough to withstand the rated cutoff temperature.

4. **SOLDERING LEADS**

The TCO leads require heat sinking during soldering operations.

5. **WELDING LEADS**

To avoid welding internal parts, care should be taken that none of the welding current is conducted through the TCO.

6. **EXAMINATION FOR DAMAGE**

During prototype development, an examination for damage of the TCO should be done after the device-to-appliance connections are made. X-raying before and after the assembly operation and close visual inspection; with special attention made at the epoxy, should be performed.